Installation and Operation Manual

eco air
www.eco air.org

Room Air Conditioners

Window Type
Professional System

ECO933W

ECO1233W

ECO1833W

ECO2433W

Register your air conditioner

Model information can be found on the CE label.

Please register your product online at www.ecoair.org. For your future convenience, record the model information below.

_____
MODEL NUMBER

_____
SERIAL NUMBER

_____
PURCHASE DATE

Congratulations!

You have purchased the very latest in room air conditioner technology. Your new EcoAir high efficiency room air conditioner will give you many years of dependable service. Many features have been built into your EcoAir air conditioner to assure quiet operation, the best circulation of cool, dry air, functional controls, and the most economical operation.

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WARNING: Before operating your unit

Make sure the wiring is adequate for your unit.

Before you install or relocate this unit, be sure that the amperage rating of the circuit breaker complies with the amp rating listed in Figure 1.

DO NOT use an extension cord.

The cord provided will carry the proper amount of electrical power to the unit; an extension cord will not.

Make sure that the Power Supply is compatible with the air conditioner.

WARNING

Electrical Shock Hazard

Always consult a qualified electrician regarding the power supply to the appliance.

Do not use plug adapters.
Do not use an extension cord.
Do not remove ground prong.

Always plug into a grounded 3 prong outlet. Failure to follow these instructions can result in death, fire, or electrical shock.

Safety Precautions

Input Rated Amp

Model	Power Supply	Input Rated Amp (Switch/Fuse)
ECO933W & ECO1233W	220-240V ~ 50Hz	13A
ECO1833W		20A
ECO2433W		32A

Note : The supply voltage can not be less than the rate voltage of the air conditioner.

Warning

- Installations must comply with the national wiring standards and conform to local authority regulations. Incorrect installation could cause injury due to fire, electric shock, the unit falling or leakage of water. Consult the dealer from whom you purchased the unit or a suitably qualified installer.
- Do not attempt to modify the air conditioner without permission or instruction from the manufacturer.
- Install the unit securely and ensure location of installation can bear the weight of the air conditioner.
- Do not install or operate the air conditioner in areas where harmful or flammable gas are present.
- Any maintenance on the air conditioner must only be carried out after disconnecting from the electric mains supply.
- Any repairs must be carried out by a suitably qualified engineer.
- Ensure the air conditioner is connected to an earthed power supply of the correct rating.
- Do not unplug the air conditioner whilst in operation. Always use the control panel to start and stop the air conditioner.
- Do not obstruct or cover the inlet and outlet grilles.
- Do not use the air conditioner in a wet room, such as bathroom. Do not allow spray or pour water over directly onto the air conditioner. Always handle the air conditioner with dry hands.

For the best cooling performance and highest energy efficiency

Keep the filter clean

Make sure that your air conditioner is always in top performing condition by cleaning the filter regularly. Instructions for removing and cleaning the filter can be found on page 19.

Provide good air flow

Make sure the airflow to and from the unit is clear. It is important to ensure the airflow around the exterior unit is not blocked.

Unit placement

If your air conditioner can be placed in a window or wall that is shaded by a tree or another building, the unit will operate even more efficiently. Using drapes or blinds on the sunny side of the dwelling will also add to your unit's efficiency.

Insulation

Good insulation will be a big help in maintaining desirable comfort levels. Doors should have weather stripping. Be sure to seal the edges around doors and windows.

Note: if you switch from Cool mode to Fan Only, and switch back to COOL mode, there is a three minute delay before the compressor comes back on.

BS Plug Wiring

(For models ECO933W and ECO1233W)

Wiring Instructions: Should it be necessary to change the plug please note the wires in the mains lead are coloured in accordance with the following code:

BLUE - NEUTRAL
BROWN – LIVE
GREEN AND YELLOW - EARTH

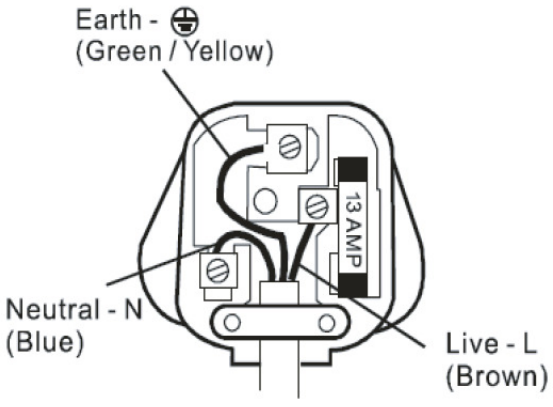
As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

1. The **BLUE** wire is the **NEUTRAL** and must be connected to the terminal which is marked with the letter **N** or coloured **BLACK**.
2. The **BROWN** wire is the **LIVE** and must be connected to the terminal which is marked with the letter **L** or coloured **RED.**
3. The **GREEN/YELLOW** is the **EARTH** and must be connected to the terminal which is marked with the letter **E** or ⏚ or coloured **GREEN** OR **GREEN/YELLOW**.
4. Always ensure that the cord grip is positioned and fastened correctly.

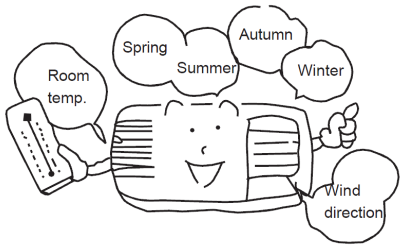
If a **13A (BS 1363)** fused plug is used it must be fitted with a 1**3A** fuse. If in doubt consult a qualified electrician.

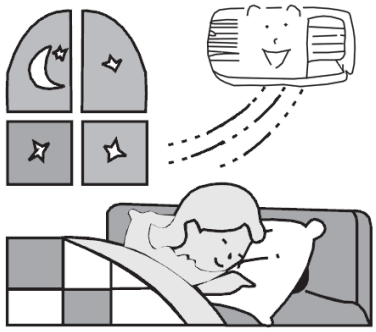
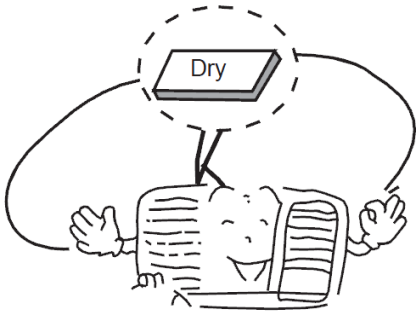
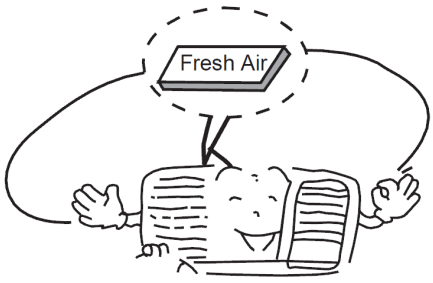
Wiring for a 13 Amp Plug (BS1363)

Please note. The Earth Terminal is marked with the letter **E** or ⏚ Earth Symbol.



Function

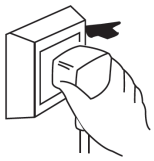
Introduction
 Window type room air conditioners of EcoAir can cool the room temperature down and dry the room. It is convenient for your work, study and life. It can be widely used in home, shop, hotel, office, library and laboratory, and so on.

Cooling in summer	Dehumidifying in rainy or humid season
During summer, use your air conditioner to cool the room temperature down. 	During rainy or humid season, use your air conditioner to remove excess moisture from your room to increase comfort and control mould. 
Heating in winter	**Fan**
During winter, use your air conditioner to heat up the room. 	The vent can be opened to circulate fresh air. For maximum efficiency, vent should be fully open during operation. 

Operating Condition

Please operate air conditioner in the correct conditions as following.

COOL mode operation	DRY mode operation
Outdoor temperature should be in range of 18℃ to 45℃. Room humidity should be lower than 90%. Otherwise, it is possible for air conditioner to frost on the air conditioner surface causing condensation. This is normal if unit is operating outside the range.	Outdoor temperature should be in range of --7℃ to 24℃.

Power requirement
Rated voltage and voltage range: 230V ~ ± 10% • The electric components will be damaged when the voltage is too high. If the voltage is too low, the compressor will vibrate violently to damage the refrigerant system and easily cause the compressor and electric components to malfunction. 
The ground must be connected. • Special socket must be used. Furthermore, the socket and wiring must conform to the wiring regulations. And the earthing method must be reliable. • In fixed circuit, there must be electricity leakage protection switch of enough power capacity and air switch with enough space.

Installation

Installation precaution

Note: This air conditioner is designed for permanent through-the-wall installation. Mounting the unit in a window will require a window mounting accessory kit which is not supplied with this unit.

Incorrect installation can cause malfunction and damage. Installation should be carried out by a suitably qualified installer.

Read This First! Electrical Requirements

IMPORTANT: Before you begin the actual installation of your air conditioner, check local electrical codes and the information below.

Your air conditioner must be connected to a power supply with the same A.C. power supply as marked on the data plate located on the chassis. Refer to page 3 for the input rated amp.

CIRCUIT PROTECTION - USE ON SINGLE OUTLET CIRCUIT ONLY.
An overloaded circuit will in variably cause malfunction or failure of an air conditioner, therefore, it is necessary that the electrical protection is adequate.

The power cord has a plug with a grounding prong of approved type and a matching receptacle is required.

WARNING: NEVER CUT OR REMOVE THE GROUNDING PRONG FROM THE PLUG. NEVER USE EXTENSION CORDS TO OPERATE AN AIR CONDITIONER.

⚠CAUTION

Cut/Sever

Although great care has been taken to minimize sharp edges in the construction of your unit, use gloves or other hand protection when handling unit.

Failure to do so can result in minor to moderate personal injury.

⚠CAUTION

Excessive Weight Hazard

Use two or more people when installing your air conditioner.

Failure to do so can result in back or other injury.

NOTICE

Instructions for mounting sleeve with slope must be observed to prevent entry of water into room.

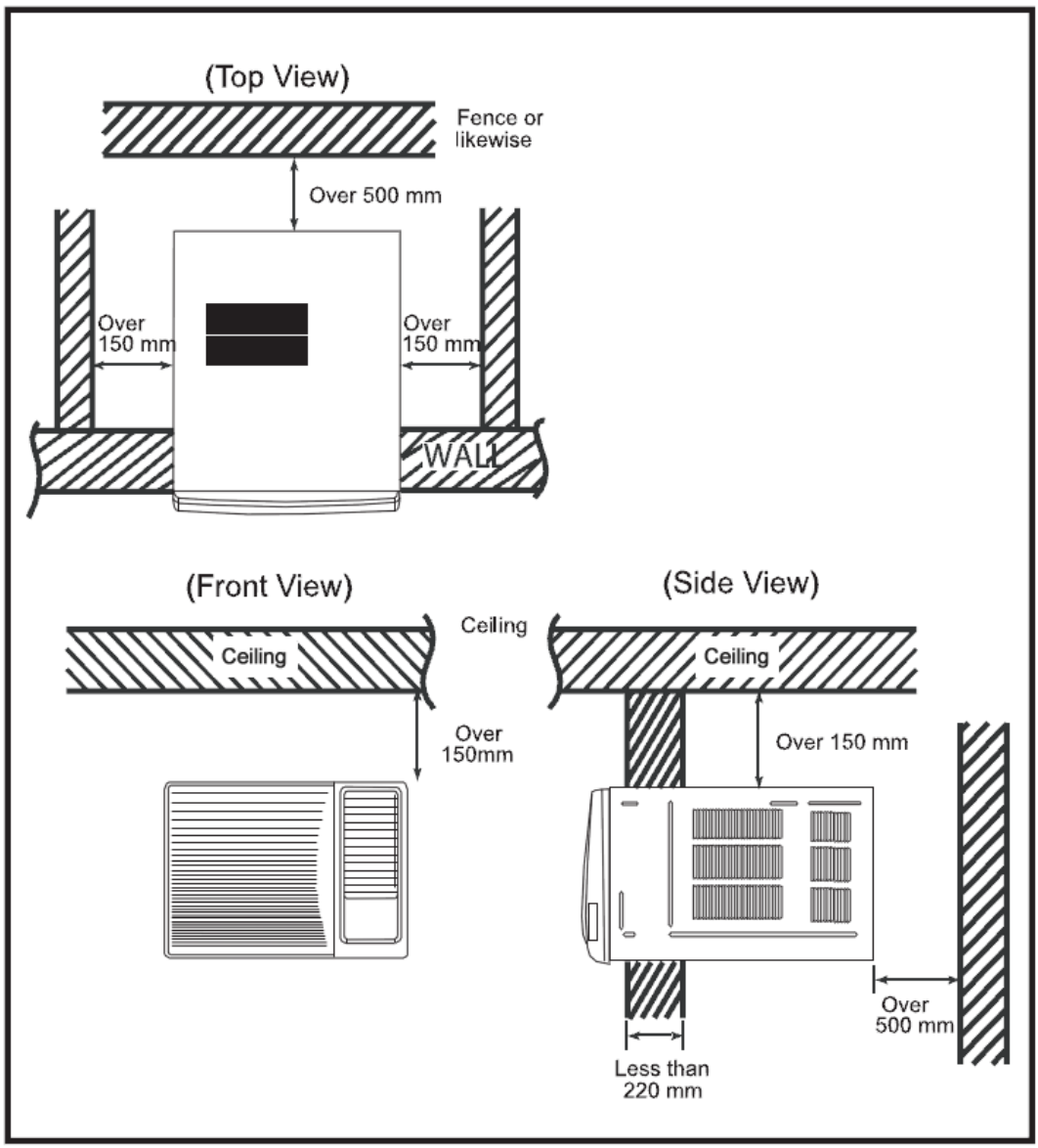
⚠WARNING

Falling Object Hazard

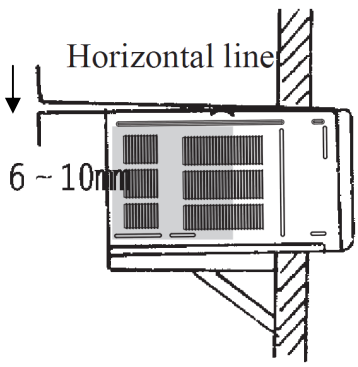
Not following Installation Instructions for mounting your air conditioner can result in property damage, injury, or death.

How to install

- Choose a location where there are no obstacle surrounding the unit, and the plug is accessible.
- Obstructions can prevent heat transfer from the condenser. Choose the installation space according to the diagram below.
- The distance of obstruction
    - from the back of the exterior cabinet must be over 500mm
    - from sides and top of the exterior cabinet must be over 150mm
    - from the top of the interior cabinet must be over 150mm
    - from sides of the interior cabinet must be over 500mm
- The bottom of the appliance must be installed 1500mm from floor level.



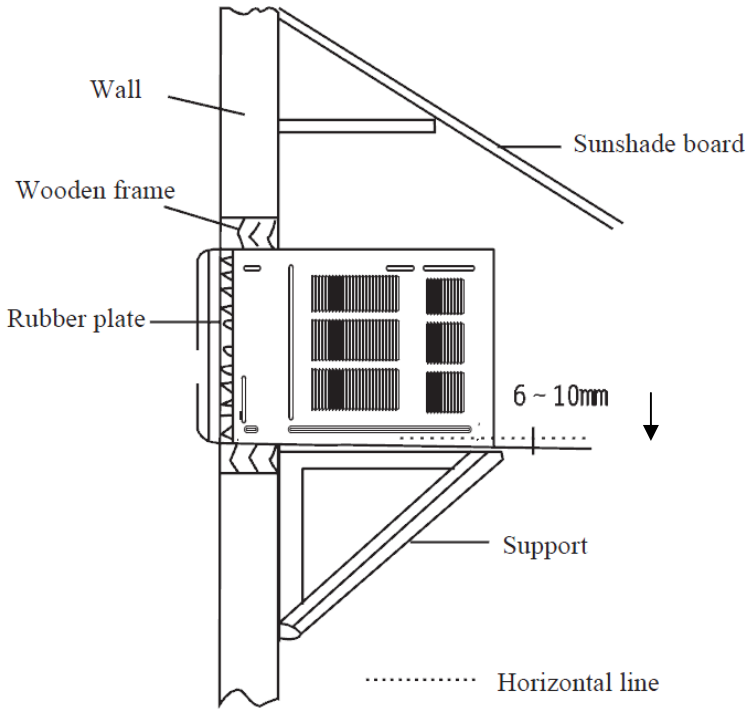
Installation Procedure



1. Remove the sticker form the front panel.
2. Prepare the installation hole (slightly bigger than unit size for ease of inserting unit).
3. Insert the air conditioner into the installation hole. Install at a slight outward down angle to allow condensate water to drain away (approximately 6 - 10mm, as figure on the right).
4. To avoid vibration and noise, make sure the unit is installed securely.
5. Seal or fill gaps around the inside and outside to provide protection against water, draughts and insects and satisfactory appearance.
6. Connect the air conditioner to the power ensuring any excess cord is positioned beneath the base.

Installation Assistance

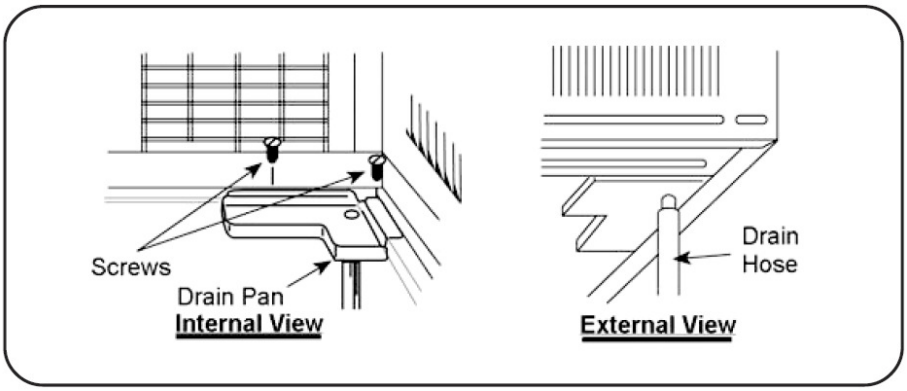
1. Use bracket support
   - The installation hole should be strong enough to support the air conditioner. You can install an outdoor bracket to support the unit (as figure on the bottom)
2. Use sunshade board
   - You can install sunshade board on top of the air conditioner to avoid anything to be dropped into it and avoid direct sunshine. When installing the sunshade board, ensure the air inlet at the side grille is not blocked.



Drain Water

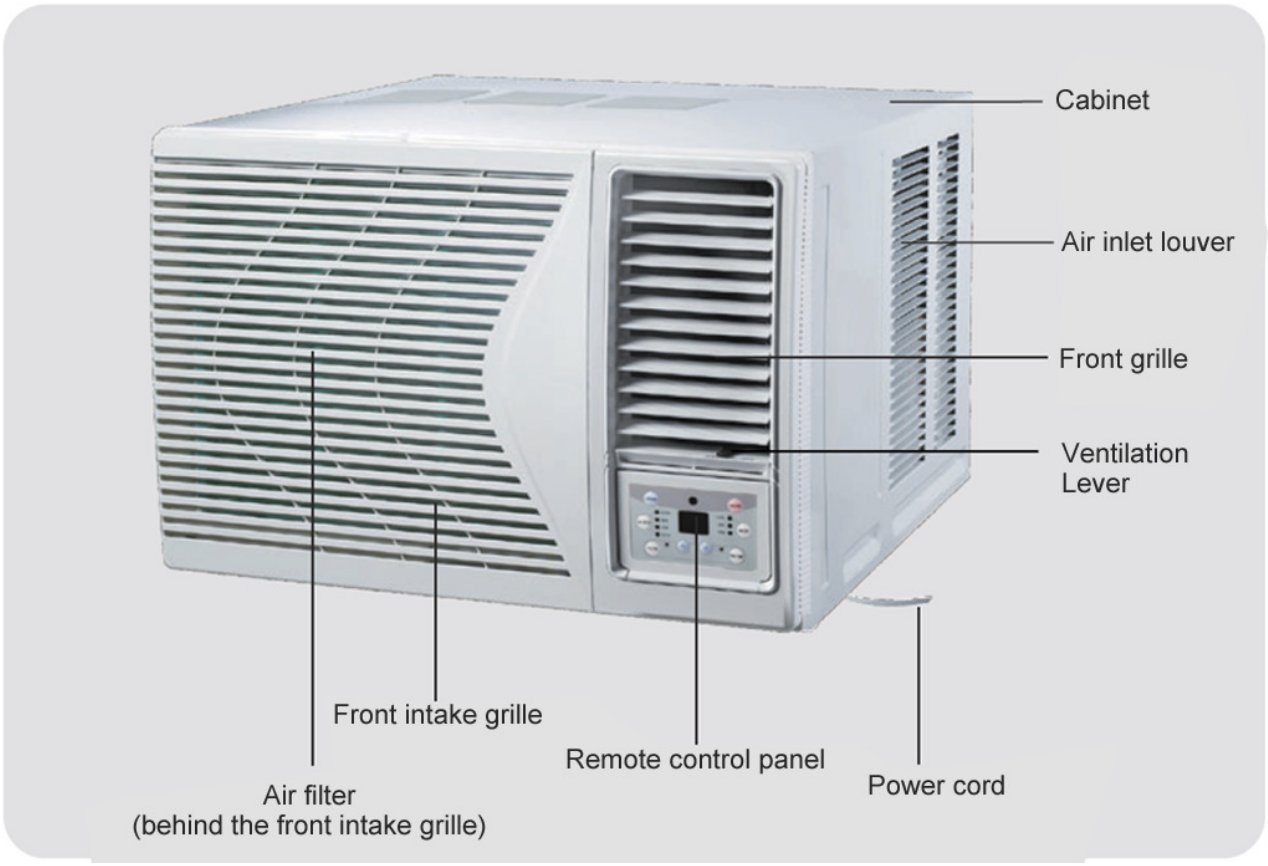
To get the maximum cooling efficiency, the air conditioner is designed to splash the condensation water on the condenser coil. You can provide an outside drain by using the following procedure, which may however cause a small loss of performance.

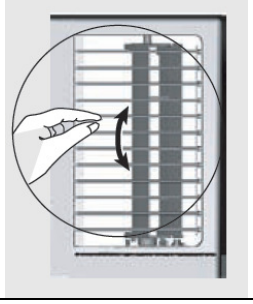
1. Slide out the chassis from the cabinet.
2. Remove the rubber plug from the body base plate.
3. Install the drain pan to the corner of the cabinet with 2 screws.
4. Connect the drain hose to the outlet on the drain pan bottom.
5. Slide the chassis into its original place in the cabinet.



Note: Drain hose can be purchased from EcoAir, please call 020 8459 2458 for further information.

Part Identification



Air direction adjustment	
<u>Vertical airflow direction vane</u> (Airflow direction adjustment up and down). The vertical airflow direction vane is controlled by positioning the vane to discharge the air upwards, downwards or straight out.	

Wireless Remote Control Operation

Note: Be sure that there are no obstructions between receiver and remote controller; Don't drop or throw the remote control; Don't let any liquid in the remote control and put the remote control directly under the sunlight or any place where is very hot.

Note: This wireless remote control is universal, and some buttons of this control which are not available to this unit will not be described below.

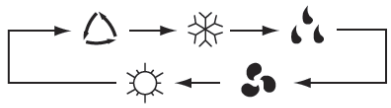
Signal transmitter

ON/OFF button

Press this button, the unit will be turned on, press it once more, the unit will be turned off. Sleep function will be cancelled, while unit off.

MODE button

Press this button, Auto, Cool, Dry, Fan, Heat mode can be selected circularly. Auto mode is default while power on. Under Auto mode, the temperature will not be displayed; Under Heat mode, the initial value is 28℃ (82℉); Under other modes, the initial value is 25℃ (77℉).



AUTO
COOL
DRY
FAN
HEAT

SLEEP button

Press this button, Sleep On and Sleep Off can be selected. After powered on, Sleep Off is defaulted. After the unit is turned off, the Sleep function is cancelled. After Sleep function set up, the signal of Sleep will display. In this mode, the time of timer can be adjusted. Under Fan and Auto modes, this function is not available.

FAN button

Press this button, Auto, Low, Middle, High speed can be circularly selected. After powered on, Auto fan speed is default.

Low fan **Middle fan**
High fan

CLOCK button

FAN button

Press this button, the clock can be set up, signal ◴ blink and display. Within 5 seconds, the value can be adjusted by pressing + or - button, if continuously press this button for 2 seconds above, in every 0.5 seconds, the value on ten place of Minute will be increased 1. During blinking, repress the Clock button or Confirm button, signal ◴ will be constantly displayed and it denotes the setting succeeded. After powered on, 12:00 is defaulted to display and signal ◴ will be displayed. If there is signal ◴ be displayed that denotes the current time value is Clock value, otherwise is Timer value.

Wireless Remote Control Operation

ENERGY SAVER button

Under the Cool and Dry mode, press this button once, the unit will enter "energy saver" , mode. Repress this button, the unit will exit "energy saver" mode.

+ button

Presetting temperature can be increased. Press this button, the temperature can be set up, continuously press this button and hold for two seconds, the relative contents can quickly change, until unhold this button and send the order that the ℃ (℉) signal will be displayed all the time. The temperature adjustment is unavailable under the Auto mode, but the order can be sent if pressing this button. Temperature of Celsius degree setting: 16-30 ; for Fahrenheit degree setting: 61-86.

- button

Presetting temperature can be decreased. Press this button, the temperature can be set up, continuously press this button and hold for two seconds, the relative contents can quickly change, until unhold this button and send the order that the ℃ (℉) signal will be displayed all the time. The temperature adjustment is unavailable under the Auto mode, but the order can be sent by if pressing this button.

LIGHT button

Press this button at unit On or Off status, Light On and Light Off can be set up. After powered on, Light On is defaulted.

SWING button

When it is pressed, the louvers start to rotate automatically and stop when repressed

TIMER ON button

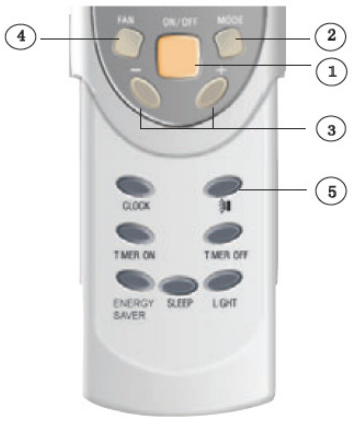
At unit off, press Timer On button, "HOUR ON" will blink and display, signal will be concealed, in the timer on setting. During 5 seconds blinking, the value can be adjusted by pressing + or - button, every press of this button, 0.5hour will be increased or decreased, but continuously press the + or - button, 2 seconds later, the value will be changed quickly, 0.5hour will be increased in every 0.25 second automatically by the remote controller. During blinking, press the Timer On button to confirm the time. After Timer On set up, when repressing the Timer On button, the Timer On setting will be cancelled. After powered on, no Timer is defaulted, signal "HOUR ON (OFF)" will not display, and only the clock is displayed. After the timer reached, the relative contents with Timer will conceal. Before setting the Timer, please adjust the clock to the current actual time.

TIMER OFF button

At unit on, press Timer Off button to enter into Timer Off setting. The method of setting is the same as for TIMER ON.

Guide For Operation – General Operation

1. After powered on, press ON/OFF button, the unit will start to run.(Note: When it is powered off, the guide louver of main unit will close automatically.)
2. Press MODE button, select desired running mode, or press COOL or HEAT mode to enter into the corresponding operation directly.
3. Pressing +or - button, to set the desired temperature (It is unnecessary to set the temp. at AUTO mode.)
4. Pressing FAN button, set fan speed, can select AUTO FAN, LOW, MID and HIGH.
5. Pressing button, to select the swing.



Guide For Operation – Optional Operation

1. Press SLEEP button, to set sleep.
2. Press TIMER ON and TIMER OFF button, can set the scheduled timer on or timer off.
3. Press LIGHT button, to control the on and off of the displaying part of the unit (This function may be not available for some units).
4. Press ENERGY SAVER button, can realize the ON and OFF of ENERGY SAVER function.

Introduction For Special Function

About Auto Run

When AUTO RUN mode is selected, the setting temperature will not be displayed on the LCD, the unit will be in accordance with the room temperature automatically to select the suitable running method and to make ambient comfortable.

About Lock

Press +and - buttons simultaneously to lock or unlock the keyboard. If the remote controller is locked, the icon will be displayed on it, in which case, press any button, the mark will flicker for three times. If the keyboard is unlocked, the mark will disappear.

About Swing Up and Down

1. Press swing up and down button continuously more than 2 seconds, the main unit will swing back and forth from up to down, and then loosen the button, the unit will stop swinging and present position of guide louver will be kept immediately.
2. Under swing up and down mode, when the status is switched from off to , if press this button again 2 seconds later, status will switch to off status directly; if press this button again within 2 seconds, the change of swing status will also depend on the circulation sequence stated above.

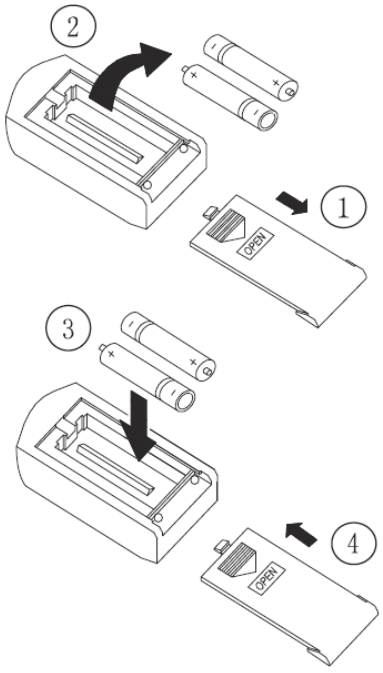
About Switch Between Fahrenheit and Centigrade
Under status of unit off, press MODE and - buttons simultaneously to switch ℃ and ℉.

About New Function of Defrosting
It indicates: after starting this function by remote controller and the unit has been under defrost status, If turn off the unit by remote controller, the unit will not stop defrosting until it is finished; if change setting mode by remote controller, the function ,which is set last time, won't be carried out until defrosting finished.

Operation of this function on or off: If remote controller is under off status, press mode button and blow button simultaneously in order to enter or cancel this new function. If the unit is under defrost mode, dual eight position on remote controller will display H1. If switch to heat mode, the position will display H1, which flickers for 5 seconds, in which case, press MODE/- button, H1 will disappear and setting temp. be displayed.

After remote controller is powered on, the new defrost function will be defaulted to be closed.

Changing Batteries and Notices

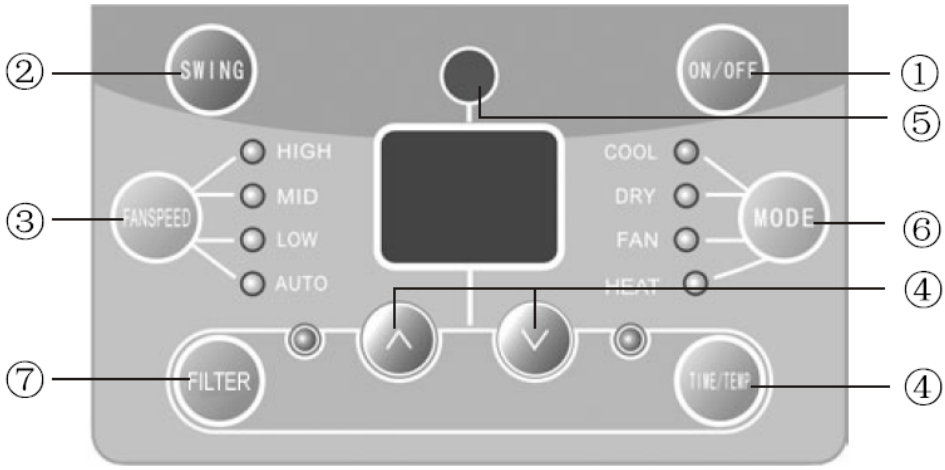


1. Slightly to press the place with , along the arrowhead direction to push the back cover of wireless remote control. (As show in figure)
2. Take out the old batteries. (As show in figure)
3. Insert two new AAA 1.5V dry batteries, and pay attention to the polarity. (As show in figure)
4. Attach the back cover of wireless remote control. (As show in figure)

Note:
- When changing the batteries, do not use the old or different batteries, otherwise, it can cause malfunction of the wireless remote control.
- If the wireless remote control will not be used for a long time, please take them out, and don't let the leakage liquid damage the wireless remote control.
- The operation should be in its receiving range.
- It should be placed at where is 1m away from the TV set or stereo sound sets.
- If the wireless remote control can not operate normally, please take them out, after 30 seconds later and reinsert, if they cannot normally run, please change them.

Control Panel

To operate manually without the wireless remote control, open the surface panel on the front.



1. **Power Button**
   Operation starts when pressing this button, and stops when pressing this button again.

2. **Swing Button**
   Activate the automatic air swing function.

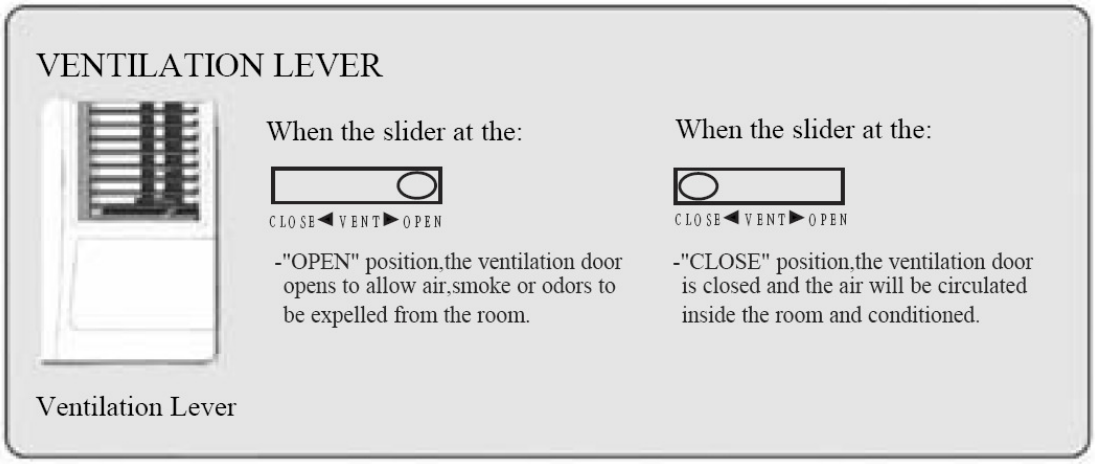
3. **Fan Speed Button**
   Select the fan speed HIGH, MID, LOW and AUTO in sequence.

4. **Temp/Timer Button**
   Press the ▲ keypad to increase the set (operating) temperature of the unit. Press the ▼ keypad to decrease the set (operating) temperature of the unit. The temperature setting range is from 16 ~ 30℃
   Press the ▲ keypad also to increase the selected time in 1 hour increments, and Press the ▼ keypad to decrease the selected time in 1 hour decrements, The time setting range is from 0 ~ 24 hours.

5. **Signal Receiver**

6. **Mode Button**
   Select the operation mode, AUTO, HEAT, COOL, FAN, DRY.

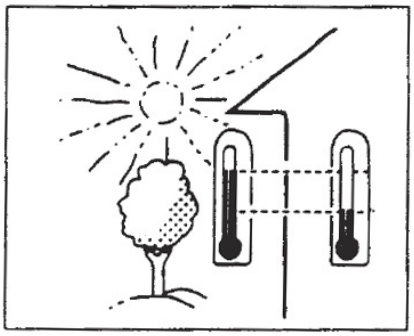
7. **Filter Button**
   This feature is a reminder to clean the Air Filter (See Care and Cleaning) for more efficient operation and cooling. The LED (light) will illuminate after 250 hours of operation. To reset after cleaning the filter, press the "Check Filter" button and the light will go off. Before the LED (light) illuminate, press the "Check filter" button until after 3 seconds, the accumulated time of. Operation will be cancelled.


VENTILATION LEVER
When the slider at the:
CLOSE◄ VENT ►OPEN
-"OPEN" position,the ventilation door opens to allow air,smoke or odors to be expelled from the room.
When the slider at the:
CLOSE◄ VENT ►OPEN
-"CLOSE" position,the ventilation door is closed and the air will be circulated inside the room and conditioned.
Ventilation Lever

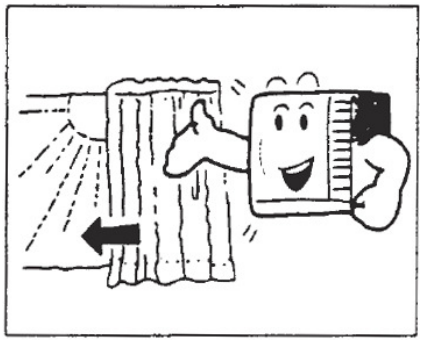
Operation Tips

Operation for comfort and economy

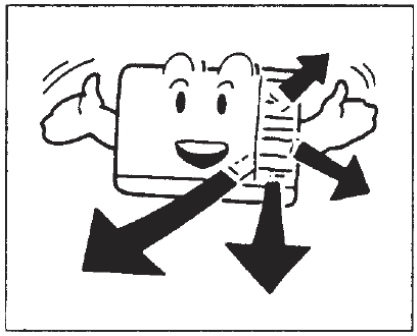
Do not overcool the room temperature. This is not good for health and wastes electricity.



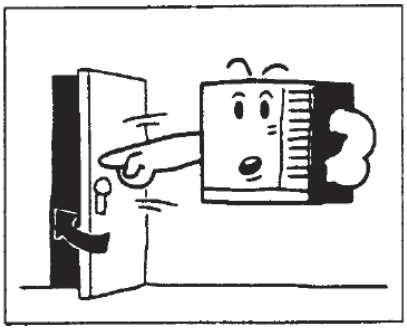
Keep blind or curtains closed. Do not let sunshine enter the room directly when the air condition is in operation.



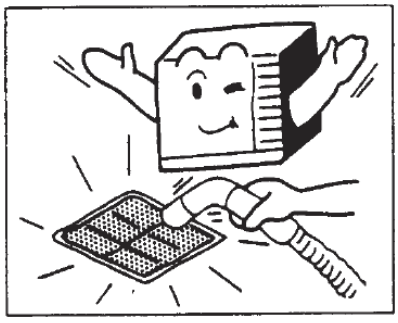
Keep the room temperature uniform. Adjust the vertical and horizontal airflow direction to ensure a uniform temperature in the room.



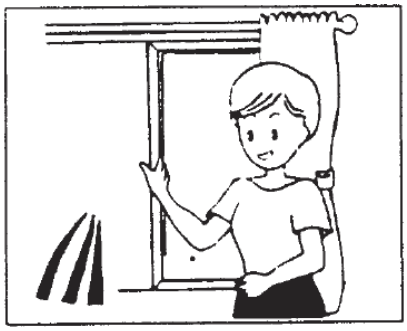
Make sure that the doors and windows are tightly closed. Avoid opening doors and windows as much as possible to keep air conditioning in the room.



Clean the air filter regularly. Blockages in the air filter reduce dehumidifying effects. Clean the air filter at least once every two weeks.



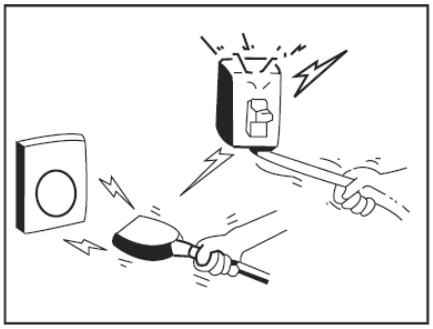
Ventilate the room occasionally. Since windows are kept closed, it is a good idea to open them and ventilate the room now and then.



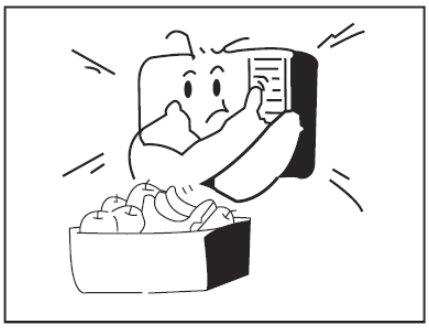
Caution

1. The plug must be accessible after the appliance is positioned.
2. Do not dry cloths by placing it on the unit.
3. If the power cord is damaged, it must be replaced by the manufacture or its service agent in void of hazard.

- Do not pull out the power cord.
- Damage to the cord may result in serious electric shocks.

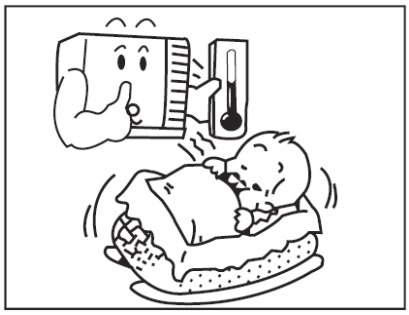


- Do not use the air conditioner for other purposes such as drying clothes, preserving foods, keeping animals, or cultivating vegetables.

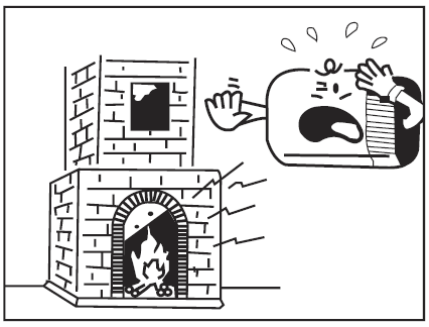


- Do not block the air intake and outlet vents. This causes lowered performance and irregular operation.
- Do not insert sticks or other objects into these vents as it is dangerous to touch the electric components and the fan.

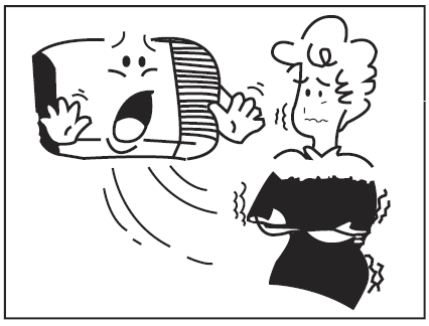
Select the most appropriate temperature. Take care to adjust the temperature to suit the conditions.



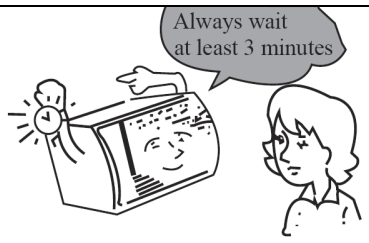
Do not use any heating source close to the unit (e.g. heater). The air conditioner's plastic parts will damage if exposed to excessive heat.



Avoid exposing the body directly to a continuous unidirectional air flow for long periods. This is not recommended for health reason.



Always wait at least 3 minutes before switching the air conditioner on again after you have switched it off during cooling or heating.

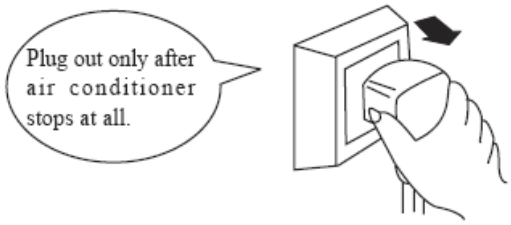


Care And Maintenance

Always turn off the air conditioner and main power supply before cleaning to ensure safety.

Clean Unit

1. Plug out first before cleaning.



2. Clean surface panel with a soft and dry cloth, which is soaked in warm water below 40℃

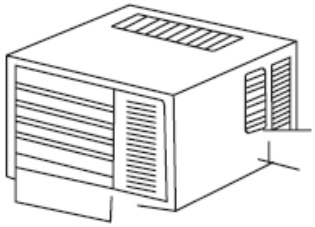
3. Do not use chemical solvent for cleaning.

4. Do not splash water directly into indoor unit, in which there are microcomputer and circuit plate, they must not be drenched with water.

Air filter

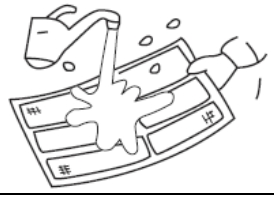
The air filter behind the intake grille should be washed at least every two weeks or as often as it needs cleaning. How to clean the air filter:

1. To remove the air intake grille, grasp the tab on the filter and pull to take out.



2. Vacuum the filter on the dusty side to remove light dust.

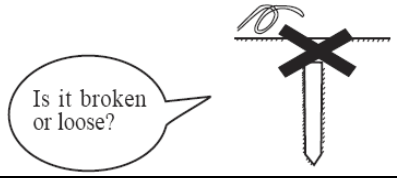
3. Wash the filter, cleaner side up under gently flowing water to wash out accumulated dust and lint.



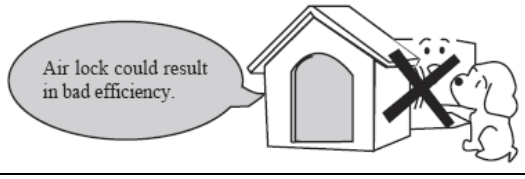
4. If the filter is very dirty, use a mild household detergent in the wash water.

Let the filter dry thoroughly before reinstalling it.

* Check earth wire

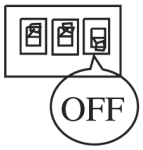


* Check if air inlet and outlet of outdoor unit



Trouble Shooting Guide

Please check the following items before asking for repair, it saves your time and money.

Fault phenomenon	Trouble-shooting
Air conditioner dose not operate at all. 	• Is there a power failure? • Is the plug out? • Is power fuse or switch off ? • Whether the voltage is too high or too low?
Cool or heat efficiency is not good.	• Is air inlet or outlet locking? • Is there any other heat/cool source in room? • Are air filters dirty very much? • Is indoor fan speed set at LOW? • Maybe the room is too hot/cool when the unit is started.
Foggy air flows out.	• At COOL mode operation, sometimes there is foggy air flowing out of indoor unit, this is because the room humid air has been cooling rapidly. • The unit is normal while the indoor outlet is sending out some odour, because the inlet air may be mixed with the smell of furniture and smoke.
The air conditioner operation is noisy.	• For a noise that sounds like water flowing: This is the sound of Freon flowing inside the air conditioner unit. • For a noise that sounds like a shower: This is the sound of the dehumidifying water being processed inside the air conditioner unit.
It seems that condensation is leaking from air conditioner.	• Condensation occurs when the airflow from the air conditioner cools the warm room air.
Air conditioner dose not operate for about 3 minutes when restart.	• This is to protect the mechanism. • Wait about three minutes and operation will begin.

Immediately stop all operations and plug out, please contact your dealer in the following situations.
• Operation starts or stops abnormally; • Power fuse or switch often breaks; • Carelessly splash water or something into air conditioner; • Electrical lines are much hotter or lines cover breaks; • Other strange situations.

Service & Warranty

ONE (1) YEAR LIMITED WARRANTY
SAVE THIS WARRANTY INFORMATION

EcoAir guarantees this product free from manufacturing defects in materials and workmanship for a period of one (1) year from the date of purchase, limited to parts only.

This unit must be operated under conditions as recommended, at voltages indicated on the unit and be installed professionally. Any attempts made to service or modify the unit, will render this **WARRANTY VOID**. The actual product may differ slightly from the illustration. This warranty is in addition to, and does not affect your statutory rights.

For further details on this warranty, please contact 020 8459 2458.

We recommend that you note the details of your purchase below and retain your original proof of purchase receipt with this manual. Keep these documents safe in the event of a warranty claim.

Date of purchase: _____

Purchased from (Dealer Name): _____

Retailer name: _____

Model number: _____

Serial number: _____

Date of installation: _____